

 SWP490-G14



CLINIC INFORMATION SYSTEM

CAPSTONE PROJECT PRESENTATION

ABOUT TEAM

Instructor



TRAN THU THUY

Members



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PART 1:

PROJECT OVERVIEW

PROBLEM

EXISTING SYSTEM

SOLUTION

OUT OF SCOPE

PROBLEM



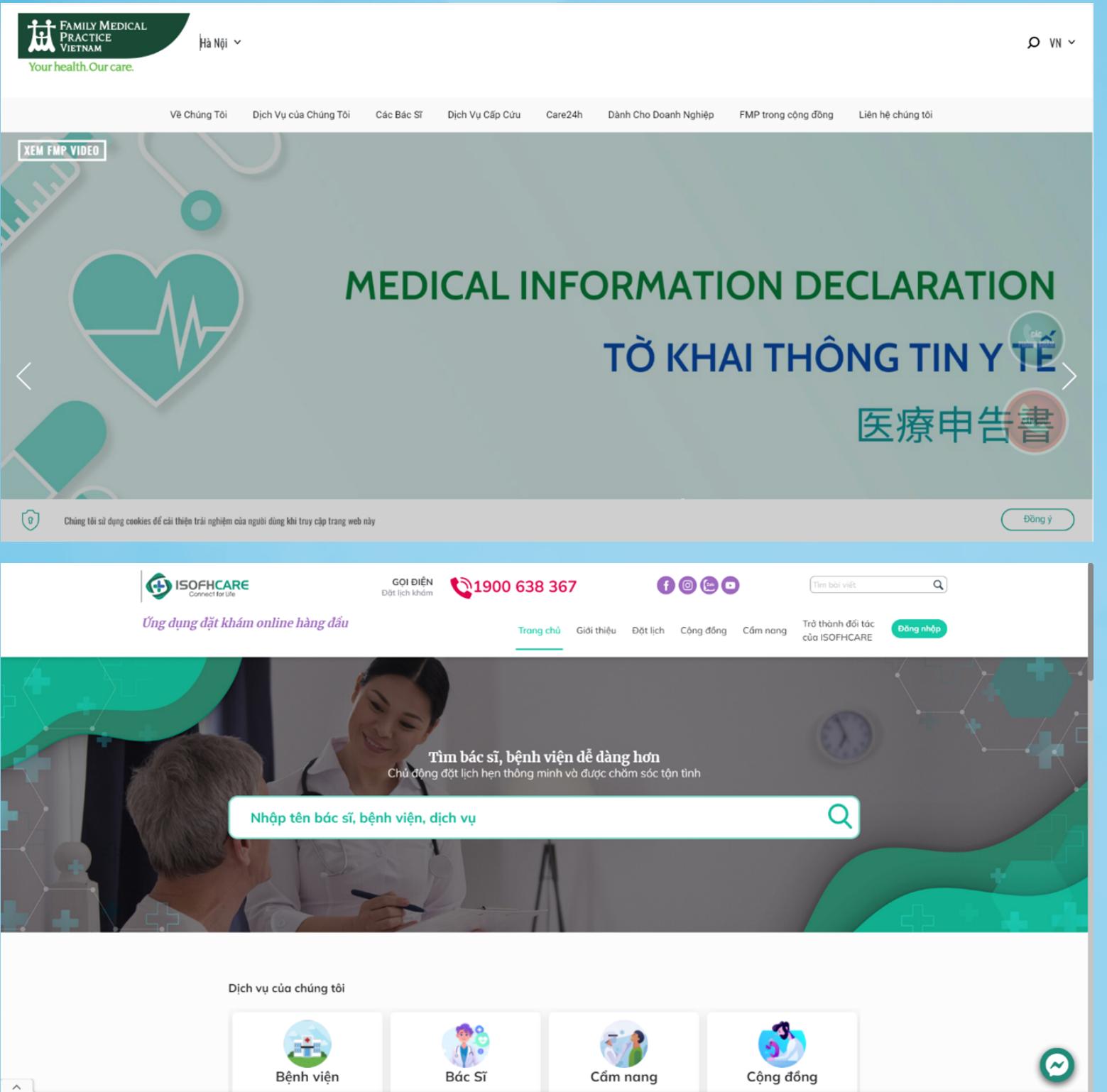
1 Overload

2 Loss of patient information

3 Medical staff have
to perform manual
allocation

4 Difficulty in control,
coordination and loss of
time to handle

EXISTING SYSTEM



The image displays two screenshots of existing clinic information systems:

- FMP website:** Shows a medical declaration form titled "MEDICAL INFORMATION DECLARATION" (TỜ KHAI THÔNG TIN Y TẾ) in English, Vietnamese, and Chinese. It includes fields for personal information and a "Đồng ý" (Agree) button.
- ISOHCARE:** Shows a landing page for booking online appointments. It features a search bar ("Nhập tên bác sĩ, bệnh viện, dịch vụ"), service icons for "Bệnh viện", "Bác Sĩ", "Cẩm nang", and "Cộng đồng", and a "Đồng nhấp" (Accept) button.

1 FMP website

2 ISOHCARE

SOLUTION

- 1 Systematize the medical examination and treatment process
-
- 2 Connections between medical staff - patients - doctors in the clinic
-
- 3 Create data for medical examination, treatment and medical records.
-
- 4 Automate processes, eliminate paperwork and cut down on tedious tasks.
-
- 5 Automate processes, eliminate paperwork and cut down on tedious tasks.
-

IN OF SCOPE

- 1 Make an appointment to examination
-
- 2 Manage categories in clinic
-
- 3 Threading the patient in clinic
-
- 4 Make medical instructions
-
- 5 Manage Medical Record,
Treatment Regimen, Examination
-

OUT OF SCOPE

- 1 Connect with pharmacy
-
- 2 Barcodes containing patient information
-
- 3 Patients can view their medical record
-
- 4 Connect with para-clinical diagnosis
-
- 5 Patients check the information of the
doctors working at the clinic
-

PART 2:

PROJECT MANAGEMENT

ORGANIZATION CHART

SOFTWARE PROCESS MODEL

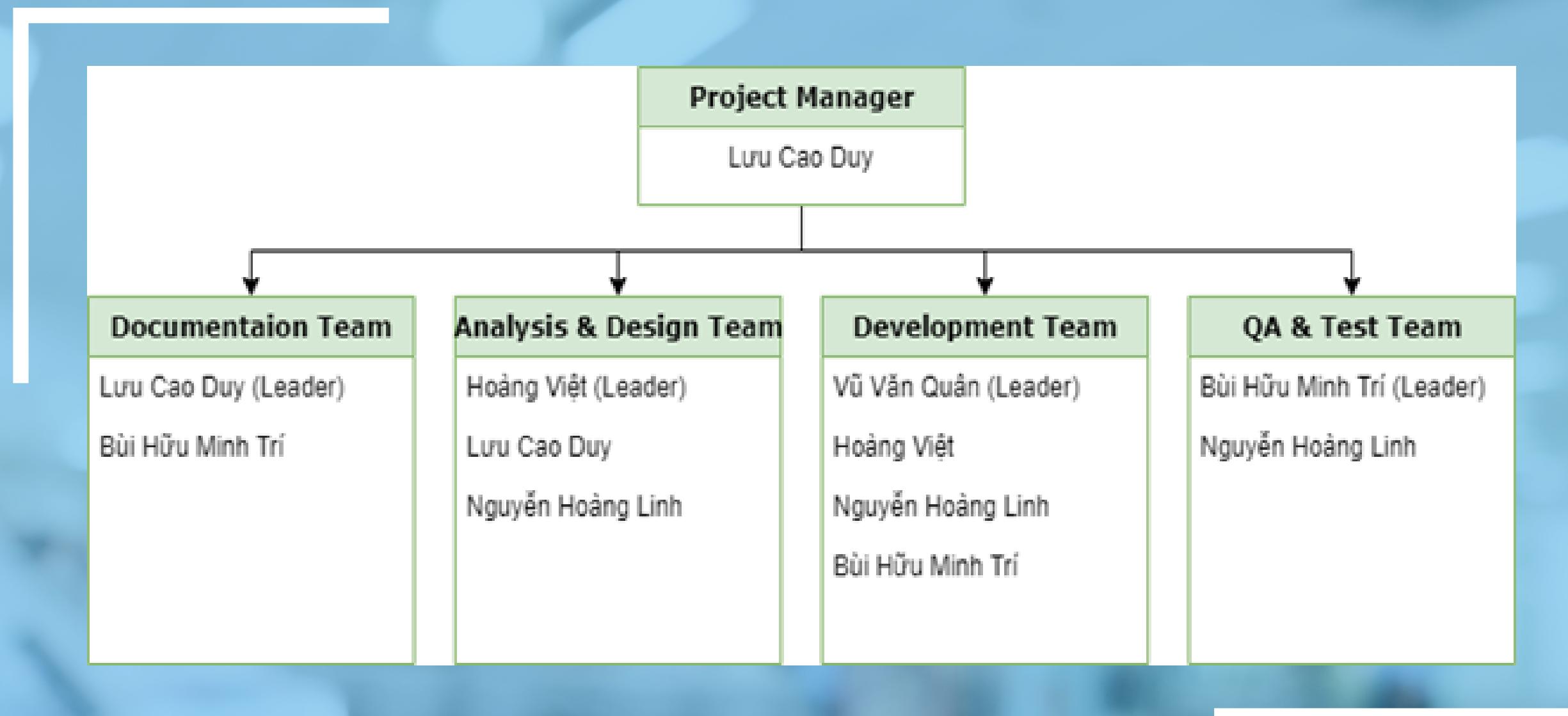
SCHEDULE

TOOLS AND TECHNIQUES

COMUNICATION MANAGEMENT

RISK MANAGEMENT

ORGANIZATION CHART



SOFTWARE PROCESS MODEL



SCHEDULE

Phase	Task	Tháng 1			Tháng 2				Tháng 3				Tháng 4			
		Tuần 1	Tuần 2	Tuần 3		Tuần 4	Tuần 5	Tuần 6	Tuần 7	Tuần 8	Tuần 9	Tuần 10	Tuần 12	Tuần 13	Tuần 14	Tuần 15
Initiation	Report 1 : Project Introduction															
Planning	Report 2 : Project Plan															
	Report 5 : Test Plan															
Executing	Analyzing - Report 3 : SRS															
	Designing - Report 4 : Design															
	Implementing - Iteration 1 Update SRS & Design Report 5 - Create UT Case & IT Case Code, UT, IT															
	Implementing - Iteration 2 Update SRS & Design Report 5 - Create UT Case & IT Case Code, UT, IT															Deploy môi trường cloud để thực hiện
	Implementing - Iteration 3 Update SRS & Design Report 5 - Create UT Case & IT Case Code, UT, IT															
	System Test Report 5 - Create ST Case Execute ST & Fix Bug															
	Report 6 : User Guides															Delivery
Transition & Closing	Report 7 : Final Report Presentation Slide Demo															

SCHEDULE

WBS ID	WBS Item	Est. Effort (man-days)
1	Project Initiating	<u>18</u>
2	Project Planning	<u>34</u>
3	Project Executing	<u>326</u>
3.1	<i>Requirement & Design</i>	38
3.2	<i>Code & Testing</i>	288
3.2.1	<i>Iteration 1</i>	70
3.2.2	<i>Iteration 2</i>	123
3.2.3	<i>Iteration 3</i>	95
4	Project Monitoring and Controlling	<u>20</u>
5	Project Closing	<u>22</u>
Total Estimated Effort (man-days)		420

Source Code Management



Document Management



Framework



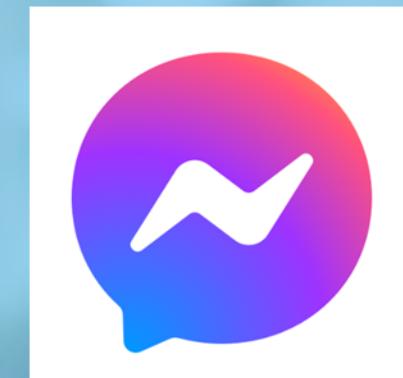
DBMSs



UML & UI Design tools



Communication Item	Who/ Target	Purpose	When, Frequency	Type, Tool, Method(s)
Team weekly meeting	All members and lecturer	Review and determine next week's job	6:30 pm every Thursday	Google meet
Team daily meeting	All members	Review and determine next job	8:00 pm to 8:30 pm everyday	Google meet
Team daily working	All members	Work together	Everyday	Facebook messenger
			8:30 pm to 12:00 am	Google meet
Unscheduled meeting	All members	Discuss and solve the urgent problems	When there are urgent problems	Google meet



RISK MANAGEMENT

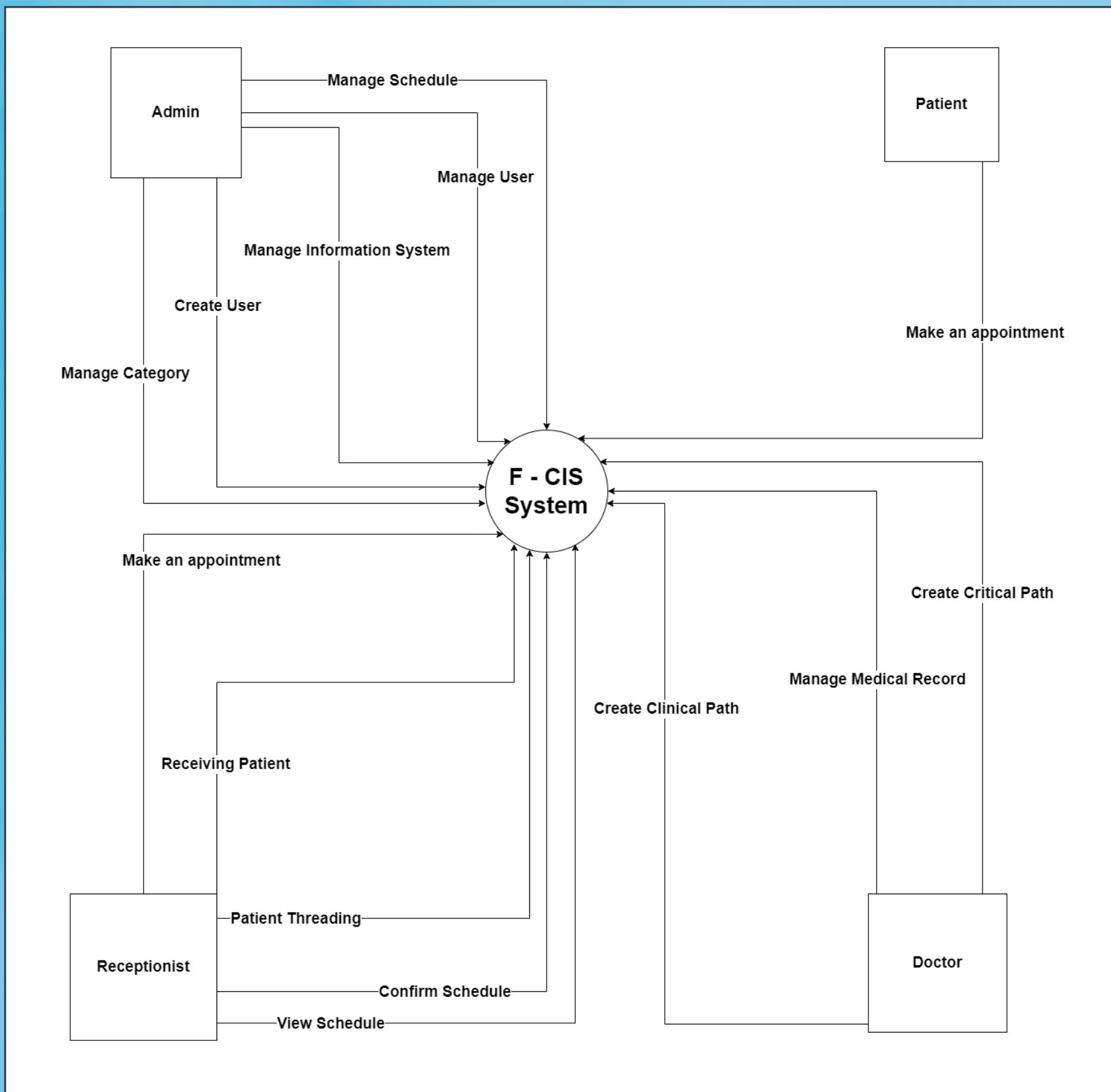
No	Risk Description	Impact	Possibility	Response Plans
1	The member do not have enough ability to complete the tasks	High	Medium	Training should be done before doing a task. Assign jobs in accordance with each member's working ability.
2	Lack Management Skill	High	High	Study about the planning, monitoring and controlling process of project management.
3	Not having a clear scope	High	Medium	All members should discuss carefully at the beginning of each iteration to define scope and requirement.
4	Members are lazy, not interested in doing job	High	Low	Motivating the members by meeting, going out Talk and ask about each person's situation
5	Member may sick and unable to work	Medium	Low	Ensure resource allocation is modified correctly to adapt to new requirement
6	Due to the influence of COVID-19, team cannot directly resolve issues together	Medium	High	Online meeting together to solve this issues
7	Internet connection is down and team members cannot work online, submit work or merge code	Medium	Low	All developer have to setup the isolated development environment and have an offline copy of the document Use alternatives to connect to the internet such as 4G, free wifi etc.
8	System database are down	High	Medium	Avoid making heavy request or asking too many question Restart database service Test before possible data errors
9	Working progress is behind schedule	High	Low	Involve whole team members in estimation, perform daily progress meetings, overtime working to recovery schedule if needed. Prioritising feature: identify what must have, should have and nice to have.
10	Computer and laptop breakdown	High	Low	All developer have an online copy of the document and code. Try to borrow another device while waiting for repair.

PART 3:

SOFTWARE REQUIREMENT SPECIFICATION

-
USER REQUIREMENT
.....
-
USE-CASE DIAGRAMS
.....
-
FUNTIONAL REQUIREMENTS
.....
-
NON-FUNTIONAL REQUIREMENTS
.....

USER REQUIREMENT



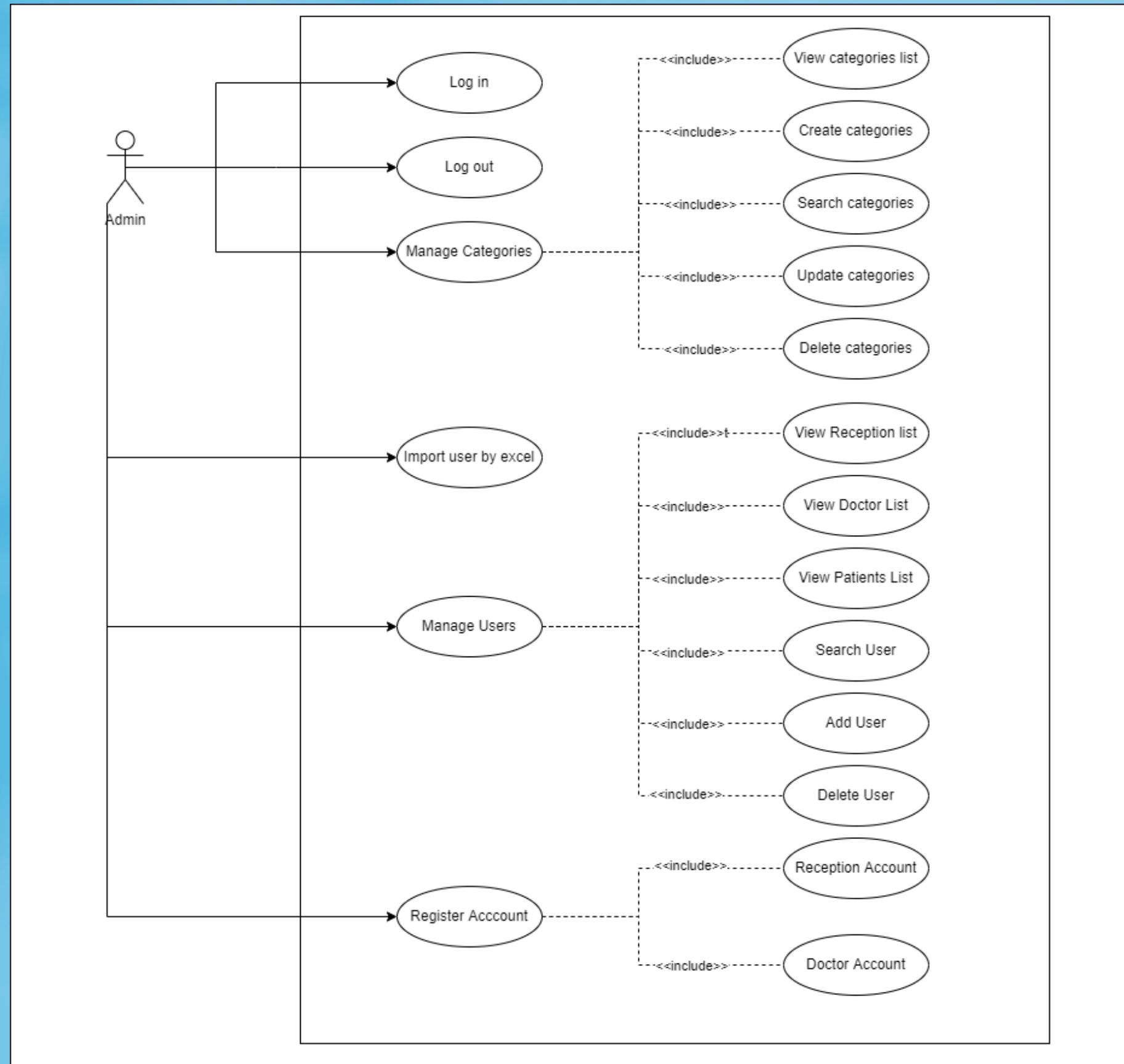
1 Doctor

2 Admin

3 Receptionist

4 Patient

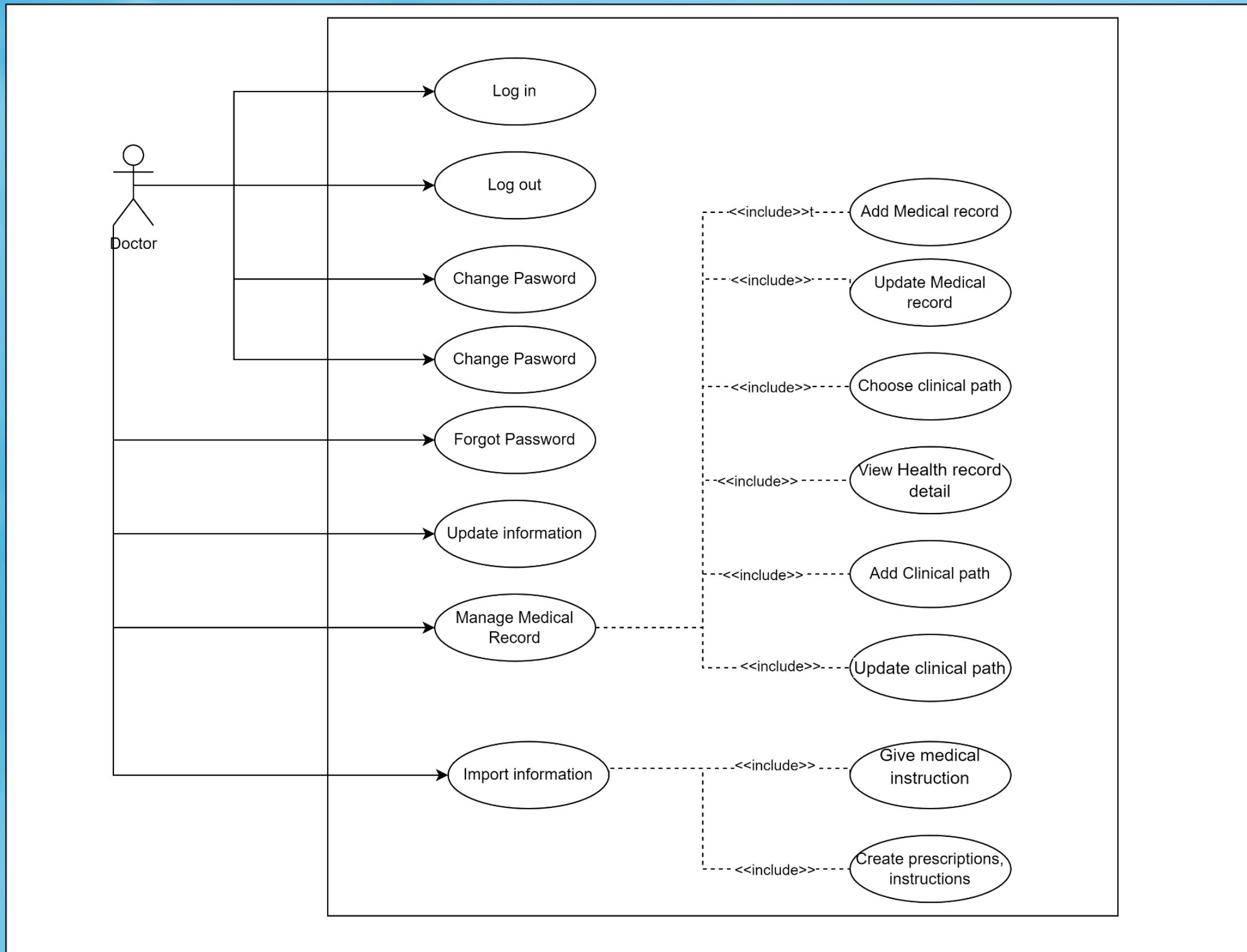
USE-CASE DIAGRAMS



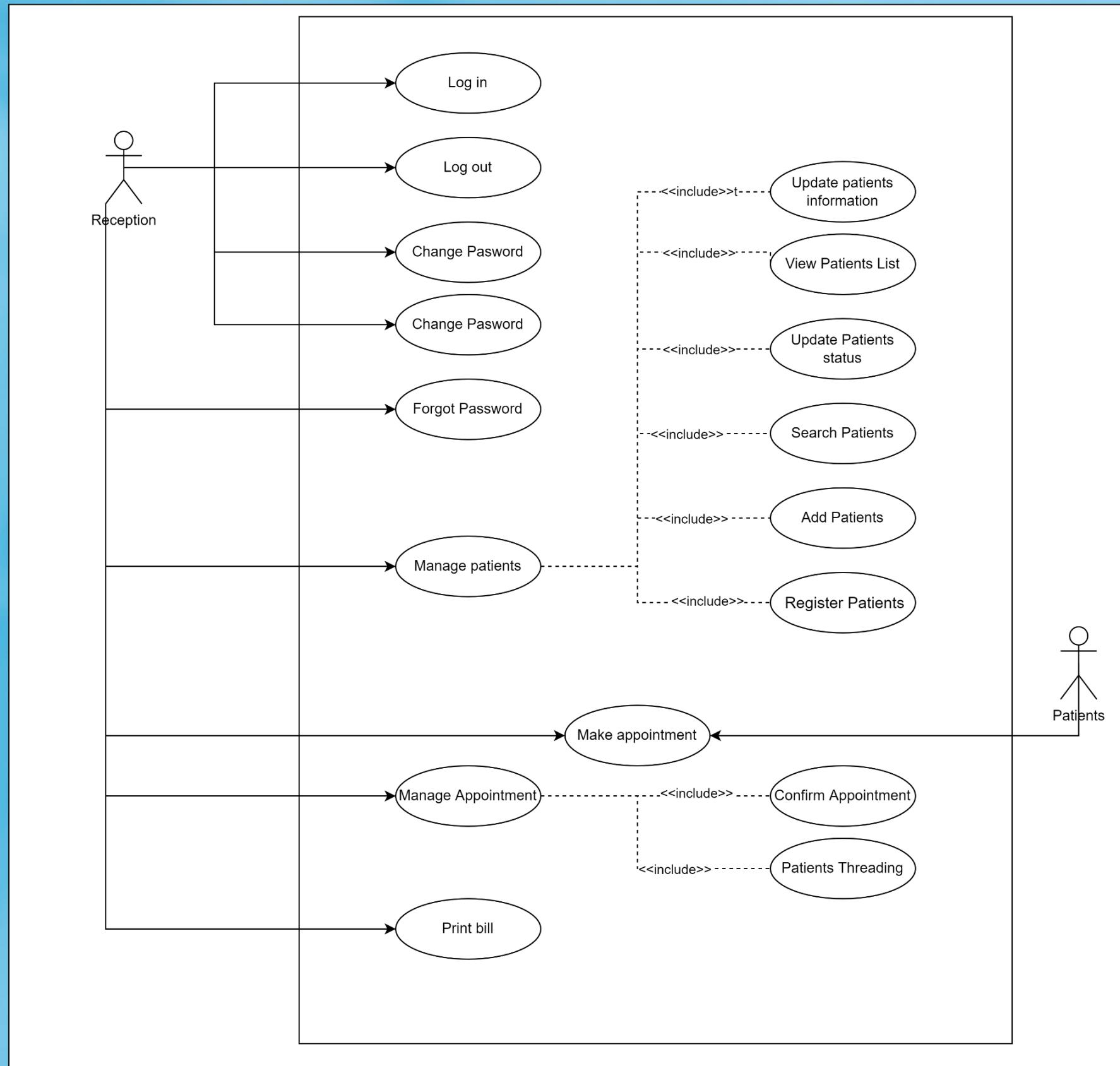
1 Rele Admin

.....

USE-CASE DIAGRAMS



2 Role: Doctor



3

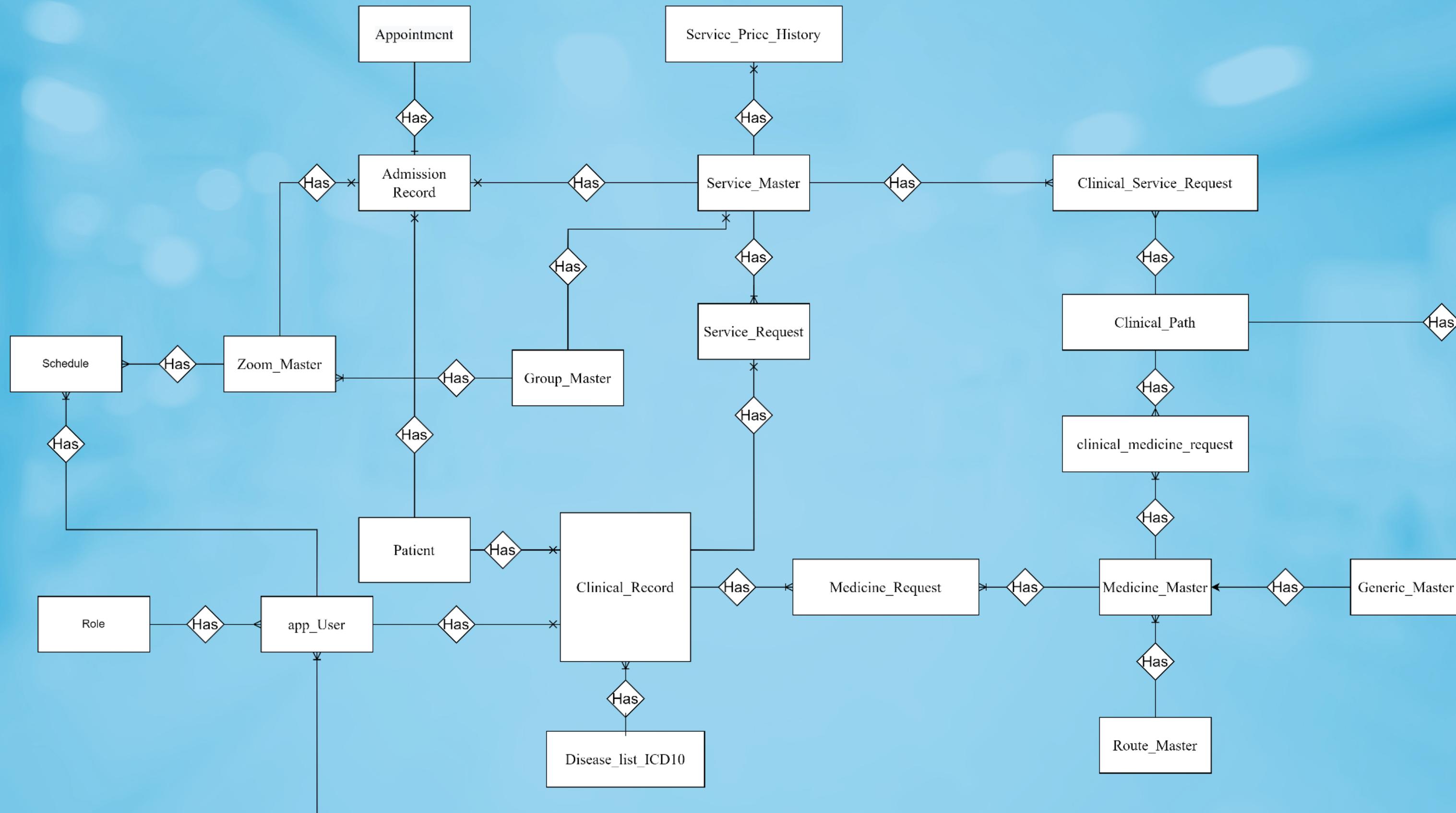
Role: Receptionist & Patient

FUNCTIONAL REQUIREMENTS

**Functional
Requirements**

ERD

SCREEN FLOW



SCREEN FLOW

1 Doctor

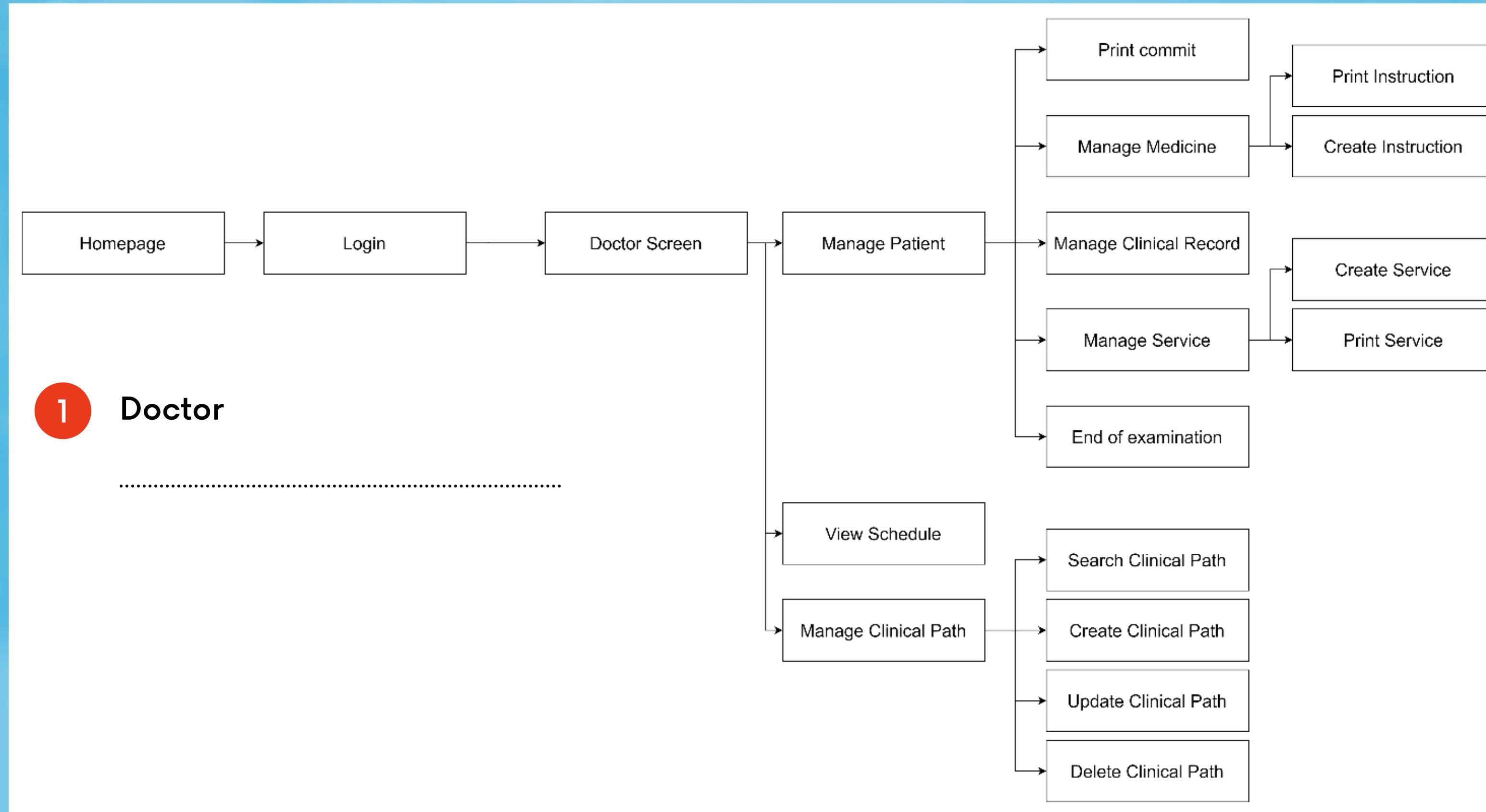
2 Admin

3 Receptionist

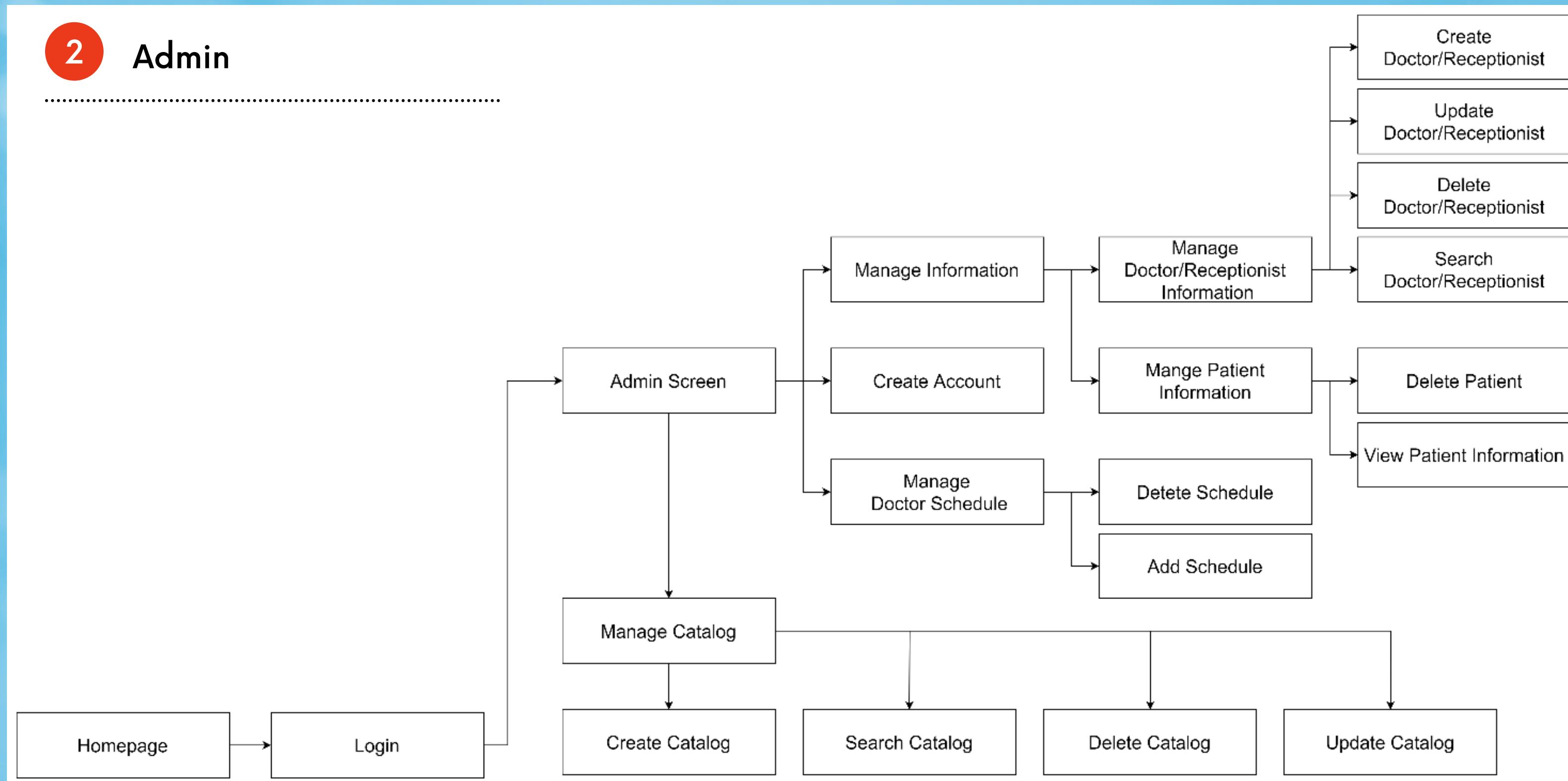
4 Patient

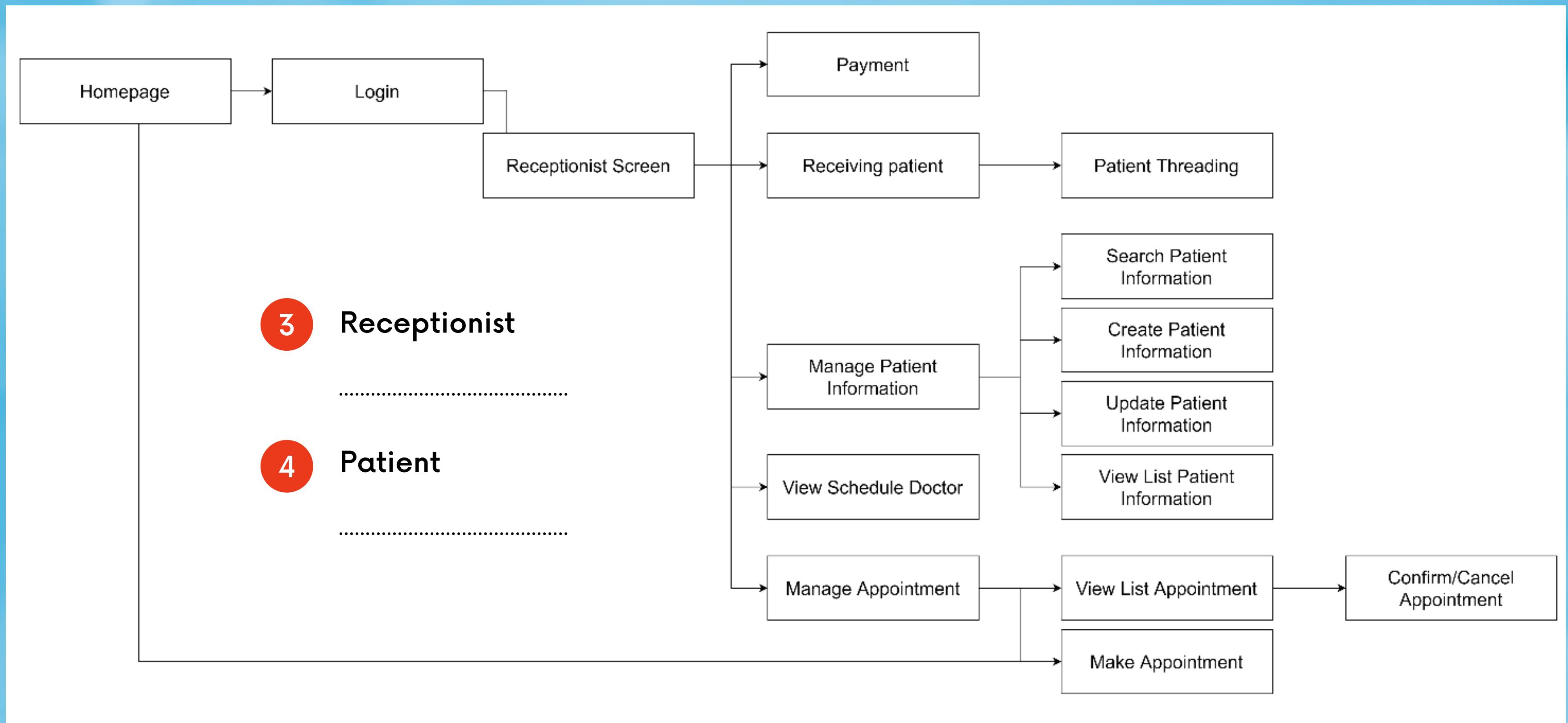


SCREEN FLOW

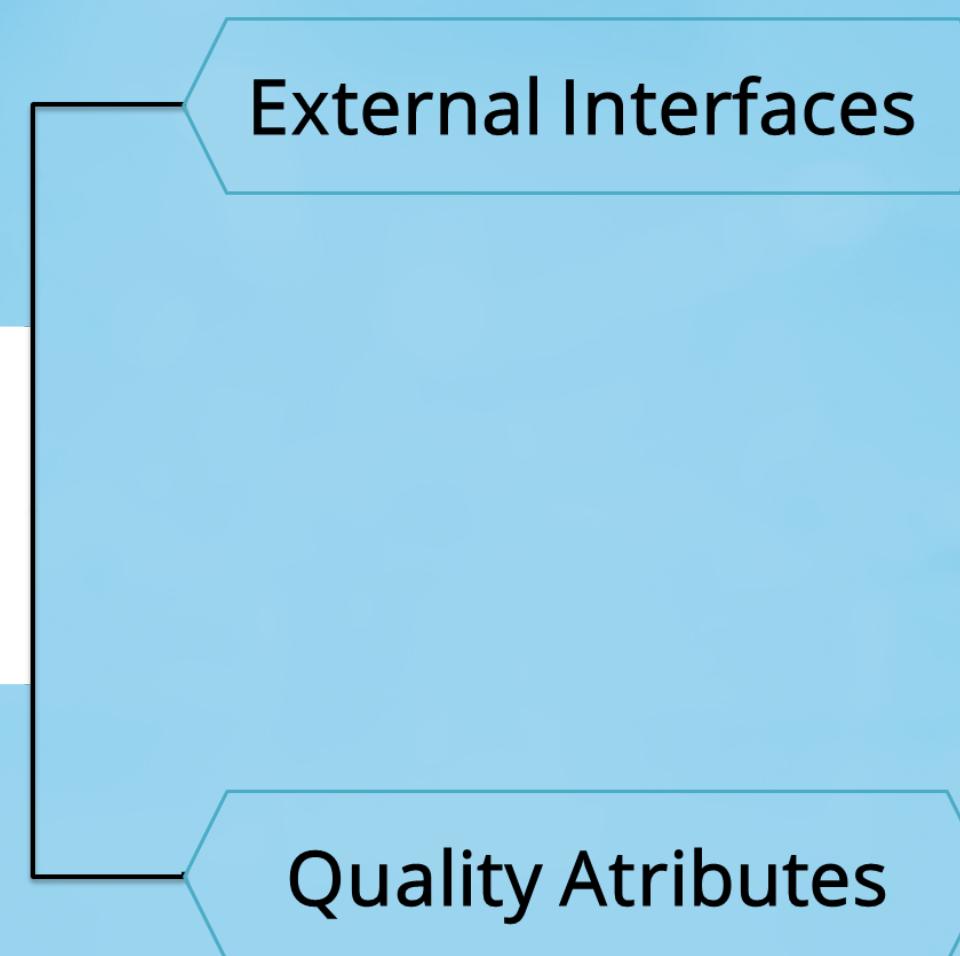


SCREEN FLOW





Non-Functional Requirements



User Interfaces
Software Interfaces

Usability
Performance

PART 4:

SOFTWARE DESIGN DESCRIPTION

OVERALL ARCHITECTURE DIAGRAM

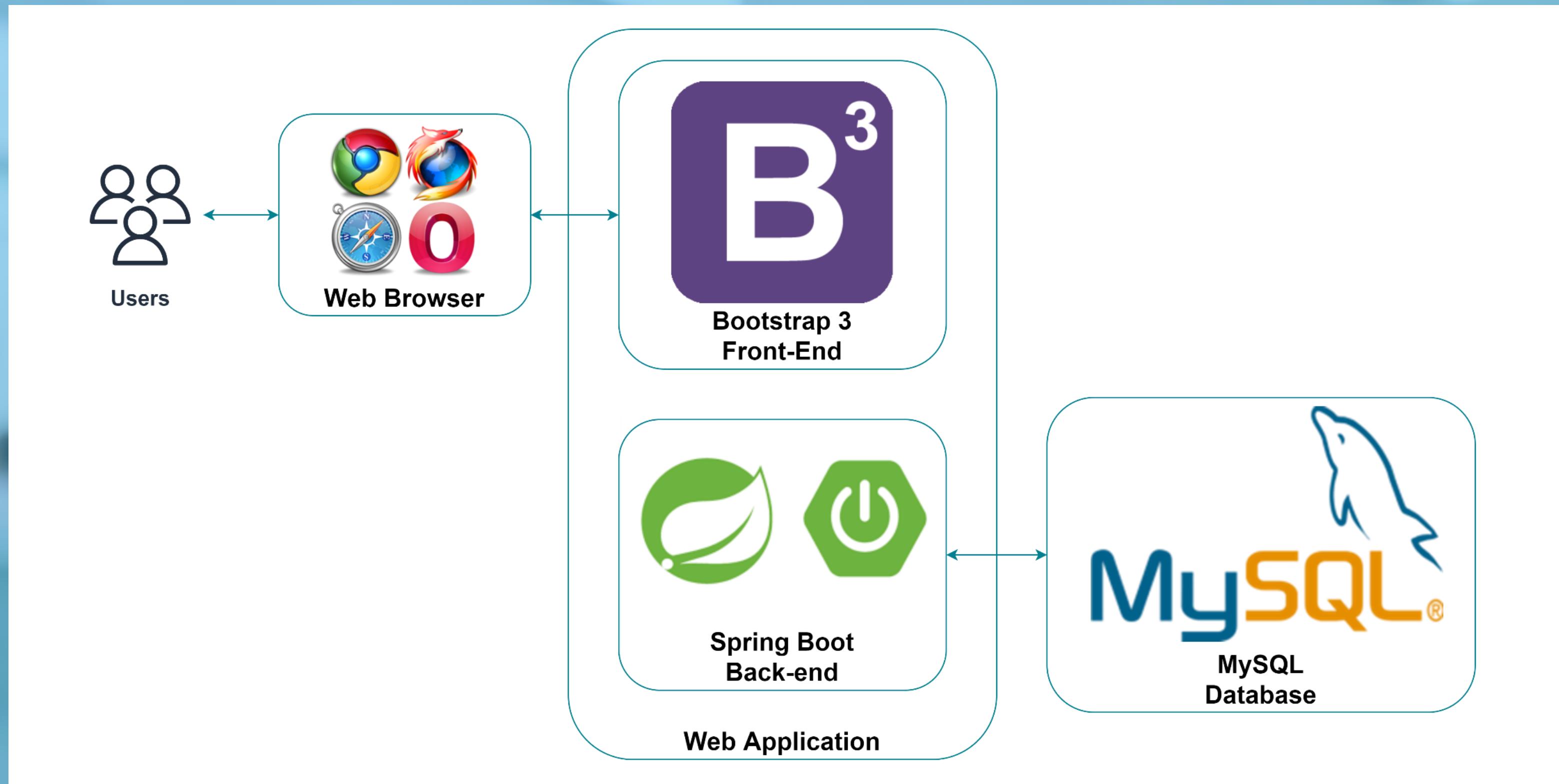
DATABASE DESIGN

PACKAGE DIAGRAM

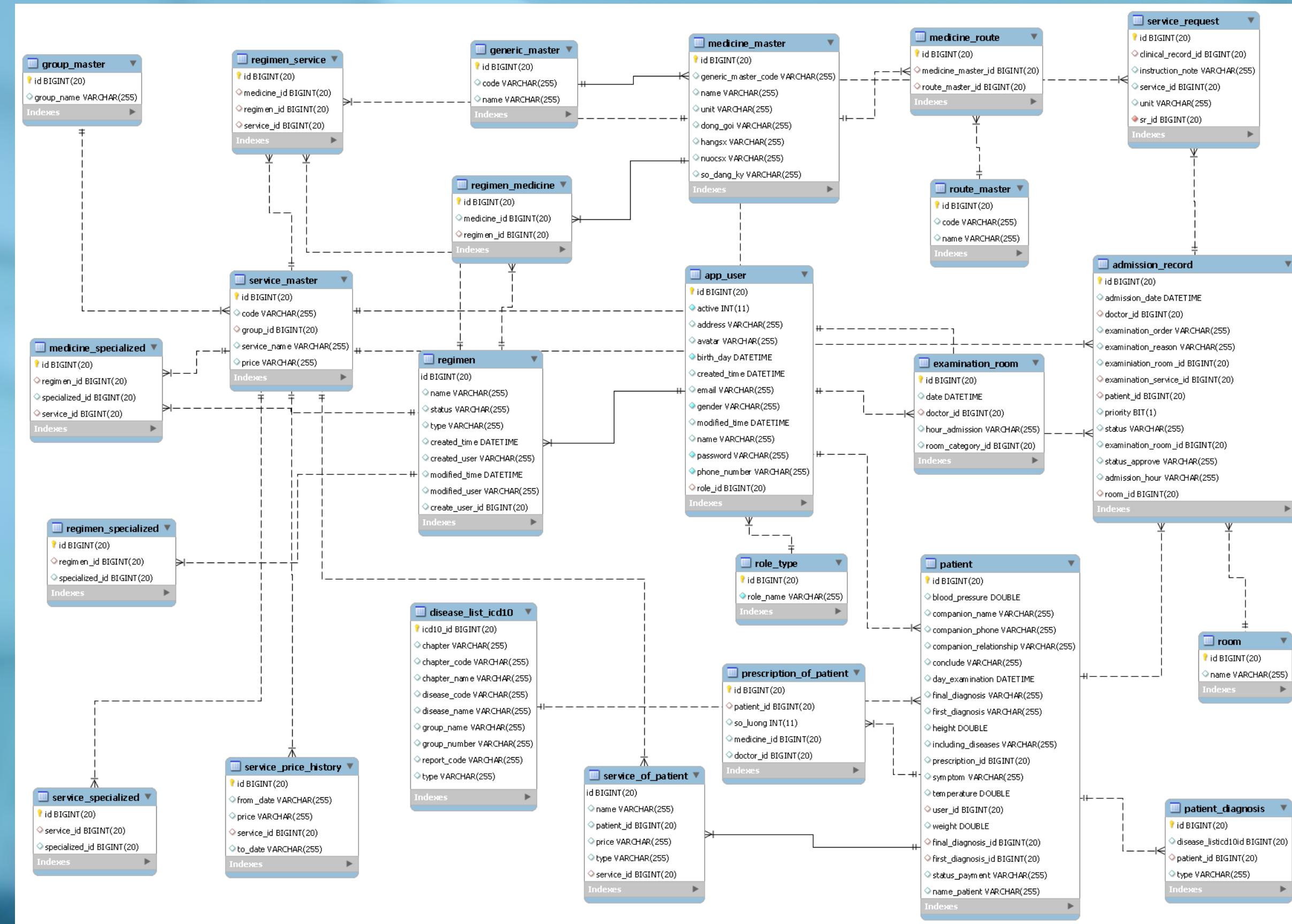
CLASS DIAGRAM

SEQUENCE DIAGRAM

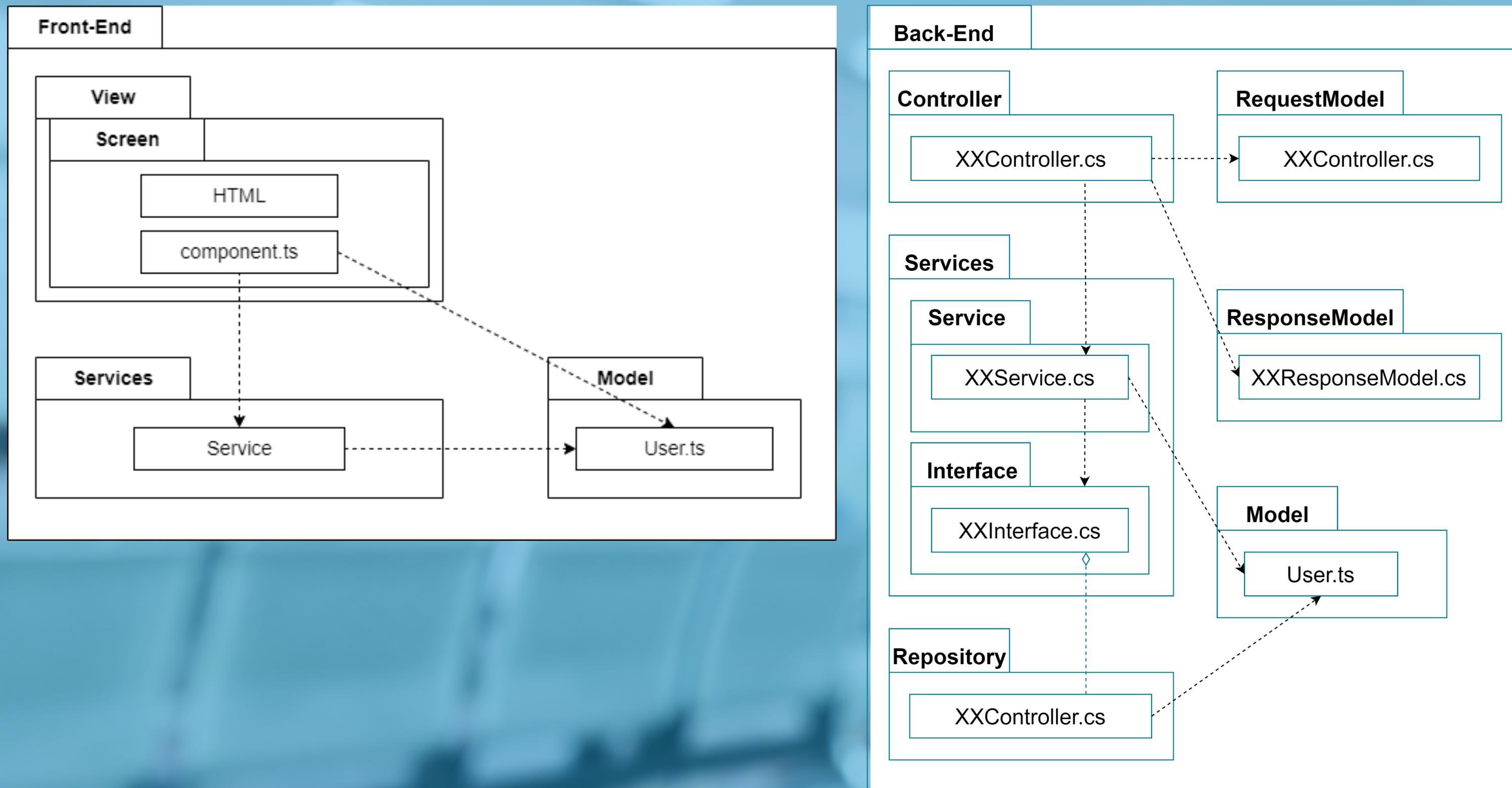
OVERALL ARCHITECTURE DIAGRAM



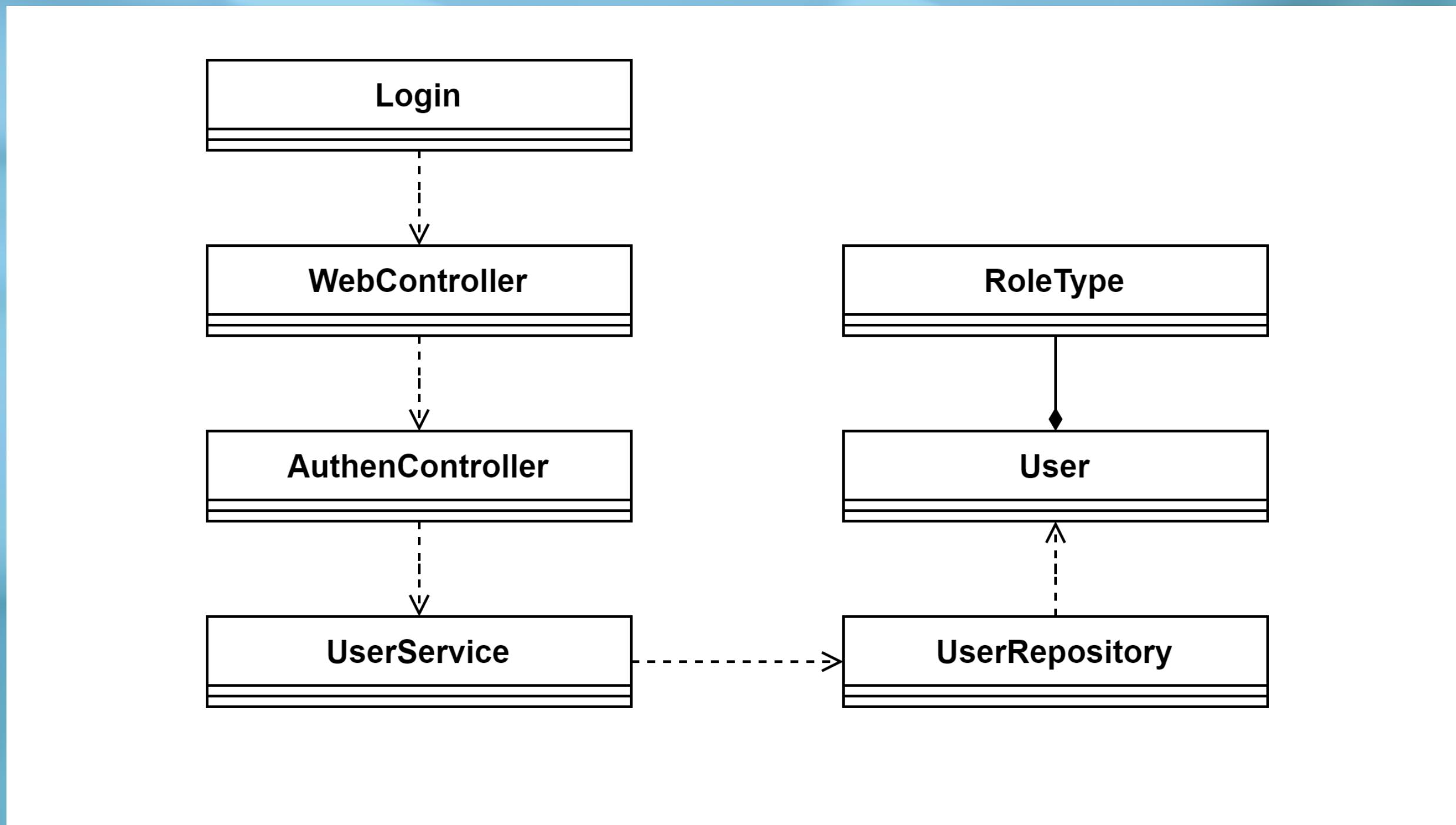
DATABASE DESIGN



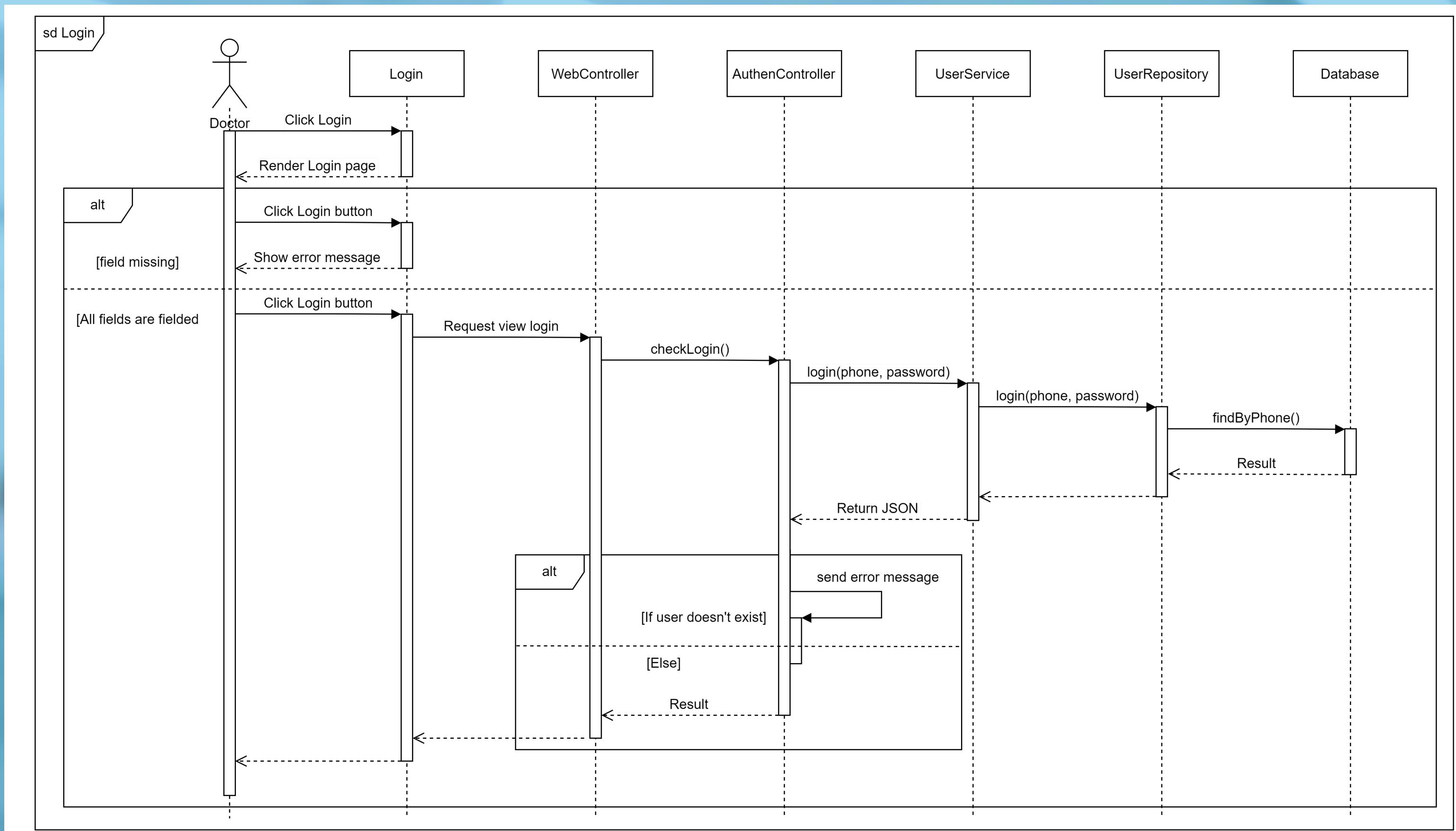
PACKAGE DIAGRAM



CLASS DIAGRAM



SEQUENCE DIAGRAM



PART 5:

SOFTWARE TESTING

TEST MODEL

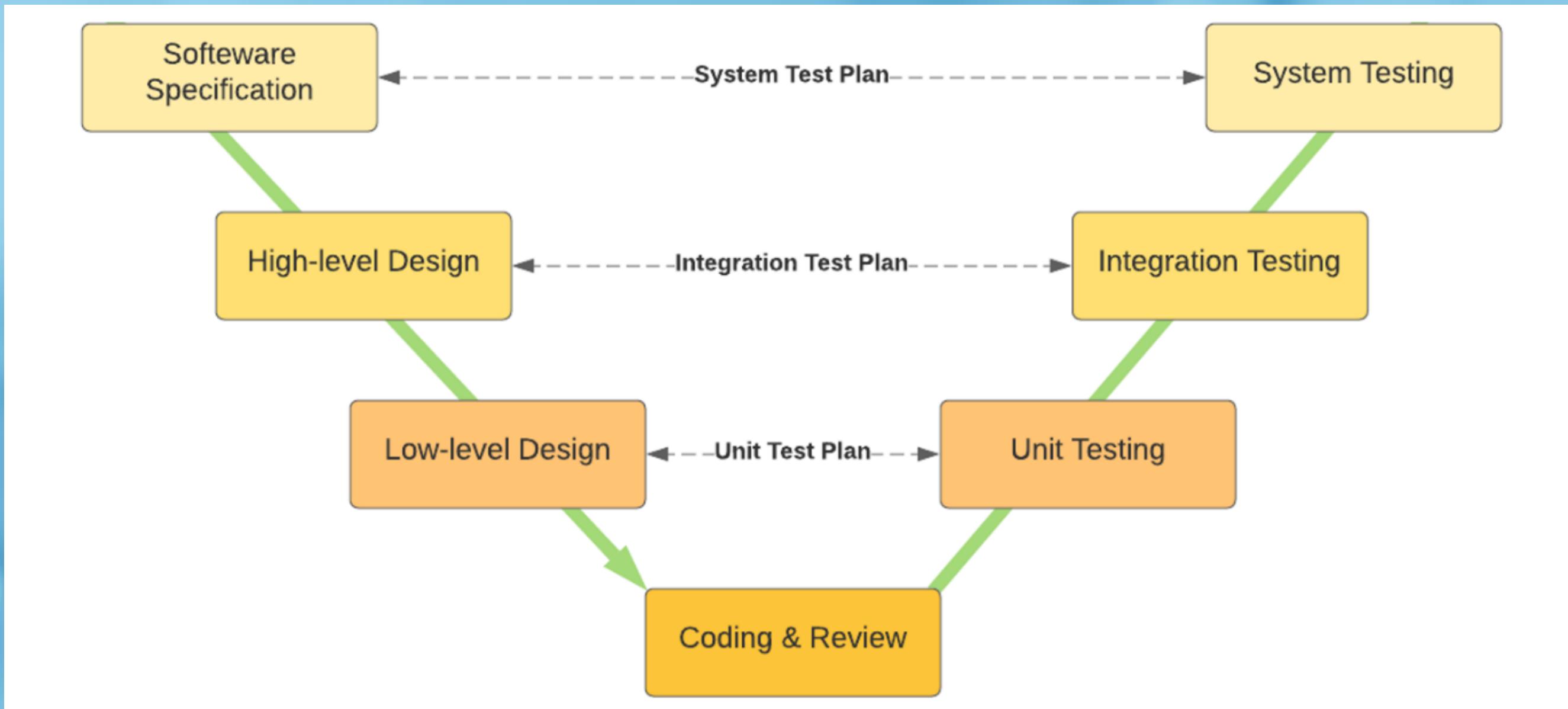
TEST PROCESS

UNIT TEST

INTEGRATION TEST

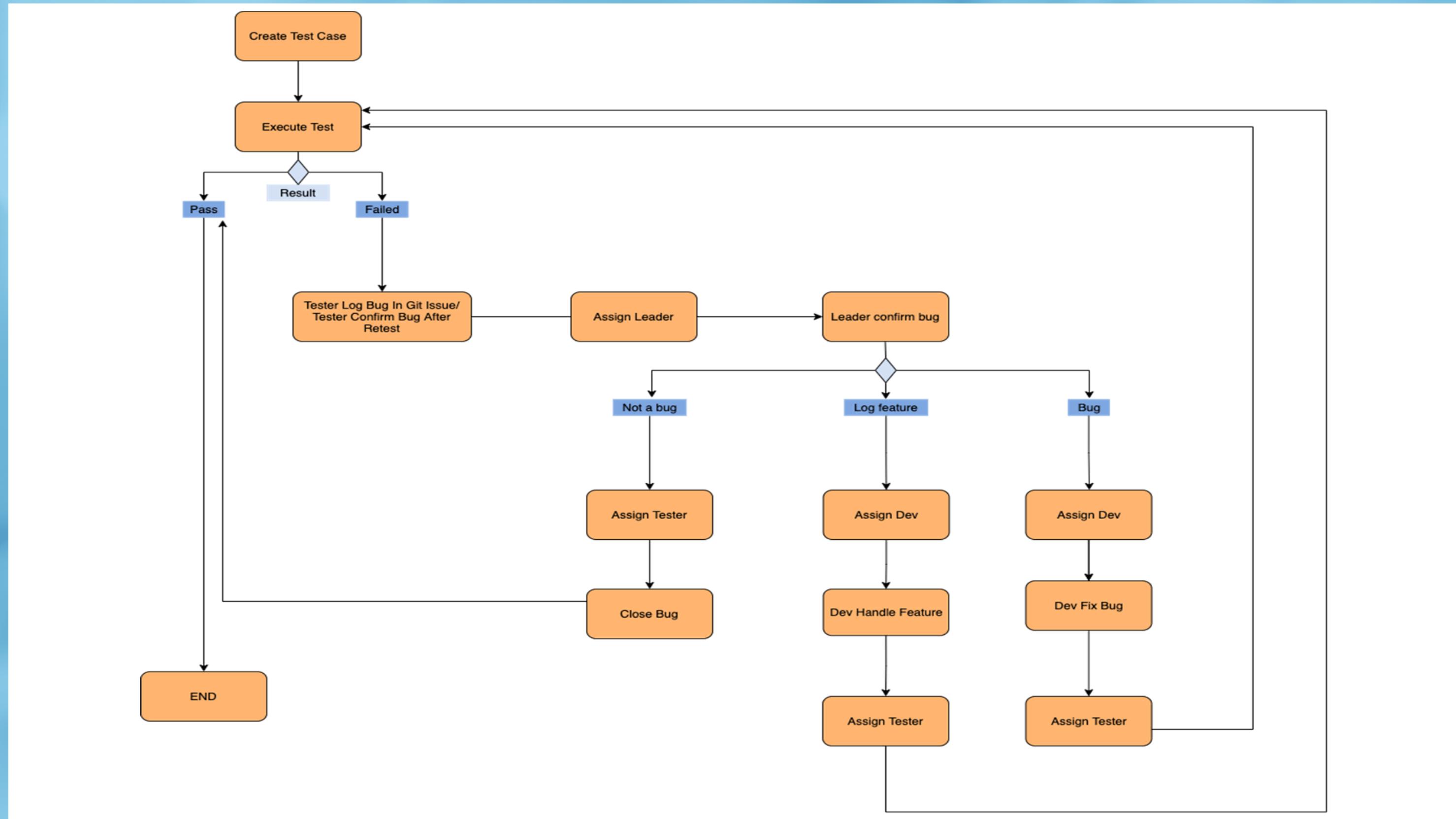
SYSTEM TEST

TEST MODEL

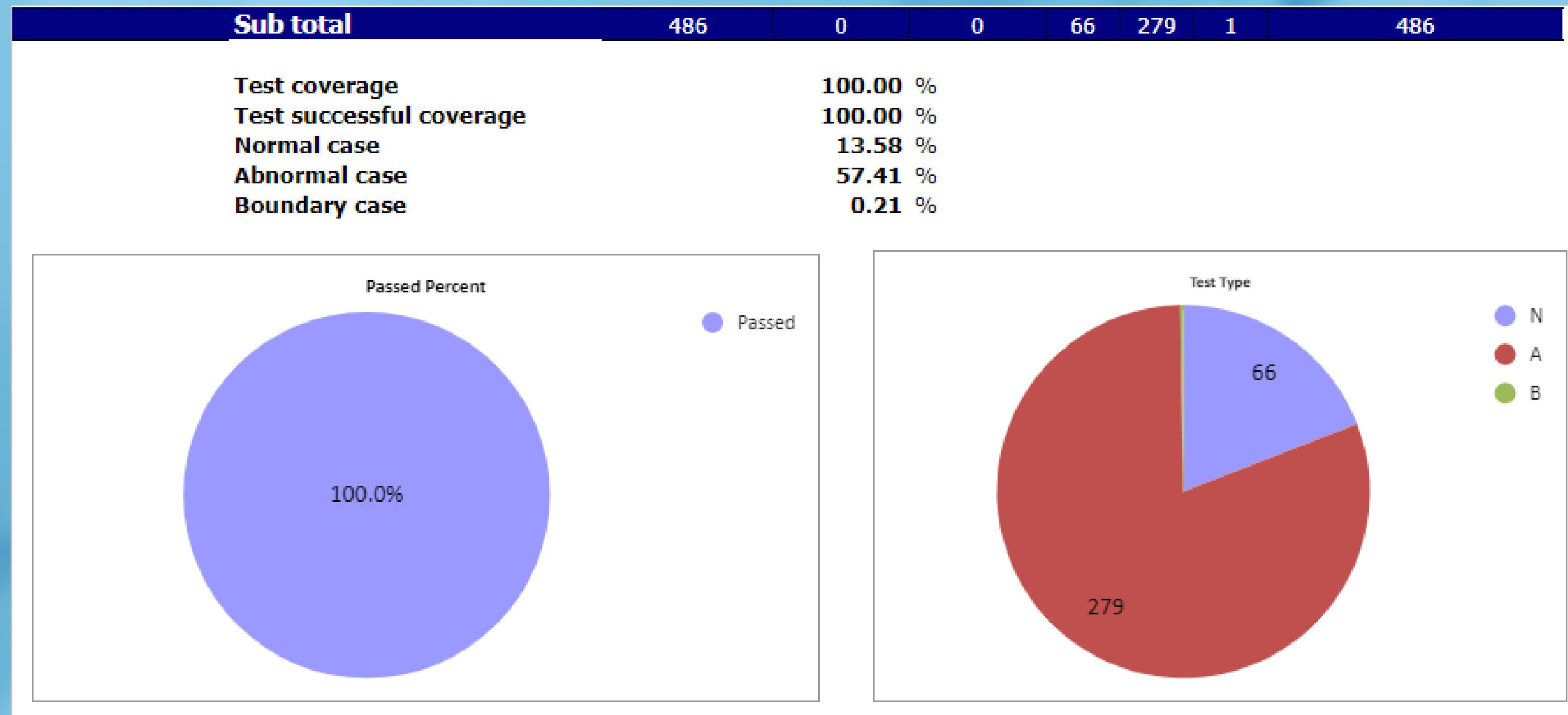


This project follows the V-model process to implement testing

TEST PROCESS



UNIT TEST



Unit Test Result

INTEGRATION TEST

No	Module code	Passed	Failed	Pending	N/A	Number of test cases
1	Authentication	21	0	0		21
2	Patient-Appointment	5	0	0		5
3	Reception-Appointment	17	0	0		17
4	Receptionist - Patient Management	19	0	0		19
5	Admin- Categories Management	54	0	0		54
6	Admin - Doctor Management	19	0	0		19
7	Admin - Receptionist Management	19	0	0		19
8	Admin - Patient Management	19	0	0		19
9	Manage Clinical Record	6	0	0		6
10	Manage Clinical Record(Service)	17	0	0		17
11	Manage Clinical Record(Medicine)	17	0	0		17
12	Admin-Manage Doctor Schedule	20	0	0		20
13	Doctor- Pre-Condition	8	0	0		8
14	Doctor- Treatment Regimen Management	50	0	0		50
15	Doctor - Profile	9	0	0		9
Sub total		300	0	0	0	300
Test coverage			100.00 %			
Test successful coverage			100.00 %			



Integration Test Result

SYSTEM TEST

No	Module code	Passed	Failed	Pending	N/A	Number of test cases
1	Scenario 1	14	0	0	0	14
2	Scenario 2	2	0	0	0	2
3	Scenario 3	19	0	0	0	19
4	Scenario 4	19	0	0	0	19
5	Scenario 5	21	0	0	0	21
6	Scenario 6	19	0	0	0	19
7	Scenario 7	20	0	0	0	20
Sub total		114	0	0	0	114
Test coverage			100.00	%		
Test successful coverage			100.00	%		



System Test Result

PART 6:

LESSION LEARNED

PART 7:

DEMO - Q&A

THANK YOU!

CONTACT US IF THERE ARE ANY QUESTIONS.



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